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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,230	11/25/2003	Naruhiro Masui	R2184.0076/P076-A	4347

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EXAMINER

CHU, KIM KWOK

ART UNIT	PAPER NUMBER
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2627

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/10/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/720,230

Applicant(s)

MASUI, NARUHIRO

Examiner

Kim-Kwok CHU

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on RCE & Amendment filed on 11/30/2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14, 15 and 17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14, 15 and 17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 09/584,693.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Remarks

1. Applicant's Remarks filed on November 30, 2006 has been fully considered but it is not persuasive.

With respect to the rejected Claims 14, 15 and 17, Applicant states that the prior art of Taniguchi does not disclose or suggest a first sync pattern formed as a space on the recording medium and a second sync pattern formed as a mark on the recording medium (page 5 of the Remarks, lines 10-13). Accordingly, the terms "space" and "mark" are components of a recorded data pattern. Using spaces and marks, the prior art of Taniguchi teaches that pre-information (headers) containing even sync and odd sync patterns formed on tracks (Figs. 1, 11A and 13; column 10, lines 26-46). Since each sync pattern is formed by spaces and marks in the optical recording medium, it can be considered that Taniguchi's first sync pattern is formed by spaces separated by marks and second sync pattern is formed by marks separated by spaces as in Applicant's Claim 14.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

*A person shall be entitled to a patent unless --
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.*

3. Claims 14, 15 and 17 are rejected under 35 U.S.C. § 102(b) as being anticipated by Taniguchi et al. (U.S. Patent 5,901,123).

4. Taniguchi teaches an information recording apparatus for recording a sequence of sync frames having all the elements and means as recited in claims 14 and 15. For example, Taniguchi teaches the following:

(a) With respect to Claim 14, the sequence of sync frames indicates of data onto tracks of an optical recording medium in which pre-information 4 are formed on the tracks at given intervals (Figs. 1 and 2; column 9, lines 43 and 44); the sync frames in which sync patterns, providing synchronization on a sync-frame basis, are inserted in the sync frames such that each sync pattern has a length in a track direction larger than a length of one

of the pre-information 4 and a position of each sync pattern matches with a position of at least one of the pre-information 4 (Fig. 2; column 10, lines 16 and 18); first (even) sync information generating means for generating first codes (even sync pre-information) that represent first sync patterns for a portion of the sync frames such that each first (even) sync pattern is formed as a space 3 on the recording medium (Fig. 2; sync information has even and odd patterns; even sync pattern is formed by spaces separated by marks); second (odd) sync information generating means for generating second codes (second sync pre-information) that represent second (odd) sync patterns for the remainder of the sync frames such that each second (odd) sync pattern is formed as a mark on the recording medium so as to meet a low-frequency reduction scheme (Fig. 2; sync information has even and odd patterns; odd sync pattern is formed by marks separated by spaces; pre-formatted sync information requires low C/N ratio; column 1, lines 44-46); sync information selecting means (in pre-format encode 22) for selecting one of the first (even) codes generated by the first sync information generating means and the second (odd) codes generated by the second sync information generating means (Figs. 3 and 4; even and odd pre-information are written of the tracks); prepit

position signal detecting (selecting) means 42 for detecting a prepit position signal from one of the prepits for each of the sync frames during the writing of the recording pulses to the recording medium (Figs. 4 and 5; column 15, lines 35-50); write position signal generating means for generating a write-position start signal based on the prepit position signal detected by the prepit position signal detecting means (Figs. 8A and 8B; column 15, lines 33-50); data encoding means 22 for generating modulation codes based on the sync frames in which the codes selected by the sync information selecting means are inserted, by modulating the sync frames containing the selected codes in accordance with a predetermined modulation scheme (Figs. 3 and 4); the data encoding means 22 generating a sequence of recording pulses by converting the modulation codes through a predetermined conversion scheme, and the data encoding means starting outputting the sequence of recording pulses in accordance with the write-position start signal supplied by the write position signal generating means (Figs. 6A-6C).

(b) With respect to Claim 15, the prepit position signal detecting means 42 detects a prepit position signal from a sync prepit of the prepits for one of the sync frames, and the write position signal generating means

generates a write-position start signal based on the detected prepit position signal, and the sync information selecting means is configured to select the first codes when a position of one of the sync patterns on the track adjacent to the land where the sync prepit is formed, matches with a position of the sync prepit, and otherwise to select the second codes (Figs. 8A and 8B; column 15, lines 33-50).

5. Claim 17 has limitations similar to those treated in the above rejection, and is met by the reference as discussed above. Claim 14 however also recites the following limitation which is also taught by the prior art of Taniguchi:

(a) a position of a data mark matches with a position of at least one of the prepits (Fig. 2; data are indexed by prepits).

6. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Kim CHU whose telephone number is (571) 272-7585 between 9:30 am to 6:00 pm, Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea Wellington, can be reached on (571) 272-4483.

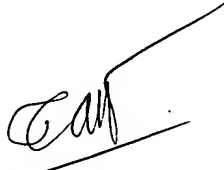
The fax number for the organization where this application or proceeding is assigned is (571) 273-8300

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished application is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9191 (toll free).

Kim-Kwok CHU

Examiner AU2627

January 3, 2007
(571) 272-7585


TAN DINH
PRIMARY EXAMINER

1/04/07